

Before the  
**Federal Communications Commission**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Sections 309(j) and 337	)	WT Docket No. 99-87
Of the Communications Act of 1934 as Amended	)	
	)	
Promotion of Spectrum Efficient Technologies on	)	RM-9332
Certain Part 90 Frequencies	)	

**COMMENTS OF MOTOROLA**

Motorola, Inc. (“Motorola”) hereby submits these comments in response to the Commission’s *Third Further Notice* in the above-captioned proceeding.<sup>1</sup> Motorola urges the FCC to eliminate the requirement contained in Section 90.203(j)(5) that any equipment authorization application submitted for certification after January 1, 2005, demonstrate that the equipment is capable of operating on 6.25 kHz discrete channels or meets the relevant equivalent efficiency standard.

This ongoing proceeding has had a significant focus on improving the efficient use of spectrum below 512 MHz that has been allocated to the private land mobile services. Most recently, the *Third MO&O* provided a mandatory migration path to 12.5 kHz technologies from the current standard operational bandwidth of 25 kHz.<sup>2</sup> Under the terms of that order, most private land mobile users operating below 512 MHz will have until January 1, 2013, to convert to 12.5 kHz technology, or a technology that achieves

---

<sup>1</sup> *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, Third Memorandum Opinion and Order, Third Further Notice of Proposed Rulemaking and Order, WT Docket No. 99-87, 70 Fed. Reg. 34726 (2005) (*hereinafter Third MO&O or Third Further Notice*).

<sup>2</sup> *Third MO&O* at ¶2.

the narrowband equivalent of one channel per 12.5 kHz of channel bandwidth (voice) or 4800 bits per second per 6.25 kHz (data) for channel widths exceeding 12.5 kHz.

At the same time that the 12.5 kHz transition was finalized, the Commission deferred any decision on whether to mandate a further migration to 6.25 kHz or equivalent efficiency technologies while it further develops the record with respect to the information submitted in the Joint Petition filed by EF Johnson, Kenwood U.S.A. and Motorola seeking to defer the enforcement of previously adopted benchmarks for the introduction of such 6.25 kHz technologies.<sup>3</sup> Without prejudicing the Commission's ultimate decision on the need for mandatory 6.25 kHz migration, the *Third Further Notice* seeks comment on: 1) whether the existing rule places burdens on manufacturers and 2) whether the deployment of non-standardized 6.25 kHz equipment significantly hampers interoperability.

As a signatory to the Joint Petition, Motorola supports the positions and statements expressed therein. With the existing VHF/UHF transition to 12.5 kHz technologies expected to last until the year 2013, consideration of a further transition to 6.25 kHz or equivalent efficiency technologies is not appropriate, especially when such technologies are not sufficiently mature from either an operational or standards perspective to mandate their use.<sup>4</sup> Because there is a lack of available equipment, unencumbered spectrum and demand for 6.25 kHz technologies in the bands below 512

---

<sup>3</sup> *Petition To Defer Enforcement Of Section 90.203(j)(5) of the Commission's Rules*, EF Johnson Company, Kenwood U.S.A. Corporation, and Motorola, Inc., WT Docket No. 99-87, submitted July 14, 2004 [*hereinafter Joint Petition*].

<sup>4</sup> *See e.g.*, Comments of Motorola, WT Docket No. 99-87, submitted September 15, 2003.

MHz, the FCC should now remove its existing provisions that require applications for equipment authorizations in these bands to specify 6.25 kHz (or equivalent) capabilities.

Motorola notes that standards work for 6.25 kHz technologies continues on a global basis. Motorola and other radio equipment manufacturers are participating in two different standards setting activities – TTA in the United States and ETSI in Europe – and both of these standards bodies are working towards developing a consensus standard based on 2-slot TDMA in 12.5 kHz bandwidth which meets the efficiency standard of current rule Section 90.203(j)(5).

Given the early stage of the technology development, the Commission should allow these marketplace activities, and not regulation, to influence the introduction and adoption of 6.25 kHz technologies into the VHF/UHF bands. What is an optimum communications solution for one customer in an urban area may not be the optimum solution for a customer in a rural area and manufacturers should be permitted to develop new equipment in the VHF/UHF bands without being forced to include bandwidths or features that the targeted market is not ready to implement on a mandated basis. While users in more heavily congested urban markets might be motivated to become early adopters of new technologies, users in less congested areas may not need to move as quickly and would thus find the government requirements burdensome.

In due course, the FCC can reassess the development of 6.25 kHz technologies and the impact that such technology would have on the private land mobile frequency bands below 512 MHz. Given that the 12.5 kHz transition will not be completed until 2013, this review can be deferred until at least the early portions of the next decade. In the interim, manufacturers of 6.25 kHz designs are certainly permitted to sell their

products in these bands, which will provide valuable experience and information for a more accurate assessment of the validity and usefulness of such technologies in the diverse VHF/UHF marketplace.

In conclusion, the broad-based support for a date-certain on which to convert to 12.5 kHz or equivalent technologies in this proceeding was due to the fact that 12.5 kHz standards are defined, the technology is proven and is being implemented in the marketplace. The Commission must ensure that the development of 6.25 kHz technologies are in a similar state of development before issuing mandates for their use. Accordingly, the Commission should eliminate Section 90.203(j)(5) of the Commission's rules and should revisit the requirements of and necessity for mandating use of this technology as we get closer to the conclusion of the transition to 12.5 kHz systems.

Respectfully Submitted,

/S/ Steve B. Sharkey

Steve B. Sharkey

Director, Spectrum and Standards Strategy

Motorola, Inc.

1350 I Street, N.W.

Washington, D.C. 20005

(202) 371-6900

August 15, 2005